

Application No. 10/756,778 – Amendment filed November 14, 2006

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace prior versions and listings of claims in the application:

Claim 3 was amended. Claims 1-2, 4-8 and 14-15 and 19-21 are cancelled. Claims 9-13 are withdrawn from consideration. Underlines indicate insertions and ~~strikethrough~~ indicate deletions.

**Listing of claims:**

Claims 1-2. (cancelled)

Claim 3. (Currently amended) An isolated ~~activated~~—Cry31Aa polypeptide ~~fragment exhibiting having~~ cytotoxic activity against human cancer cells selected from the group consisting of Hela, Sawano, TCS, MOLT-4, HL-60, Jurkat, A549, Hep-G2 and Caco-2 cells, the polypeptide comprising a sequence having at least 97% identity with a Cry31Aa2 polypeptide fragment, the complete amino acid sequence of the Cry31Aa2 polypeptide fragment being as set forth in SEQ ID NO: 8, with the proviso that said polypeptide does not consist of the Cry31Aa1 amino acid sequence fragment as set forth at positions 232 to 723 of SEQ ID NO: 18.

Claims 4-8.(cancelled)

Claim 9. (withdrawn) A method of modulating the level of cry31Aa2 active protein in a cell comprising a modulation of the level or activity of the polypeptide of claim 3.

Claim 10. (withdrawn) A method of using a polypeptide of claim 3 for lysing a human cancer cell.

Claim 11. (withdrawn) The method as recited in claim 10 wherein the cells are selected from the group consisting of HELA, TCS, HL-60, Jurkat, and Hep-G2 cells.

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Claim 12. (withdrawn) A method of testing the cytotoxicity of a polypeptide as defined in claim 3 against a candidate cancer cell comprising determining the EC50 of the polypeptide on the candidate cell, wherein the polypeptide is characterized as possessing cytotoxicity against the candidate cell if the EC50 of the polypeptide against the candidate cell is measurably lower than that against a normal T cell.

Claim 13. (withdrawn) A method for lysing a human cancer cell comprising applying a cytotoxic amount of a polypeptide of claim 3 on a human cancer cell.

Claims 14-15. (cancelled)

Claim 16. (previously presented) An isolated polypeptide as recited in claim 3, wherein said polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 13.

Claim 17. (previously presented) An isolated polypeptide as recited in claim 3, wherein said polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 15.

Claim 18. (previously presented) An isolated polypeptide as recited in claim 3, wherein said polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 8.

Claims 19-21. (cancelled)

Claim 22. (previously presented) An isolated polypeptide as recited in claim 3, wherein said polypeptide comprises an amino acid sequence of a crystal protein contained in the *Bacillus thuringiensis* strain in the deposit at the International

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